

REMARKS

Applicant has added the cross-references to related applications in the Specification. have cancelled Claims 1-27 and added new claims, Claims 28-37. These amendments are intended to facilitate receipt of an early Notice of Allowance and to distinguish the claims over various references cited in prosecution of the related applications.

During prosecution of the parent application and related applications, the Examiners have relied on U.S. Patent No. 4,916,023 to Kawabata, U.S. Patent No. 5,393,830 to Smeal et al. and U.S. Patent No. 4,465,806 to Lee.

Applicant's invention is generally directed to a laminating resin composition. The laminating resin composition is one that is typically coated, sprayed, or brushed onto a substrate. The resin is particularly useful when applied to various articles of manufacture such as, for example, marine vessels, vehicles, and aircraft in that it serves as a protective coat for the surface of the article. The laminating resin composition comprises an unsaturated polyester resin, a vinyl ester resin, from about 1 to less than 15 percent by weight of a polyfunctional acrylate compound, and less than about 15 percent by weight of a vinyl monomer, with the proviso that the laminating resin is devoid of alkoxylated bisphenol-A dimethacrylate.

Conventional laminating resins have typically been used in conjunction with a volatile monomer diluent such as styrene to facilitate the use of the resins in liquid form. The use of these resins, however, has become unfavorable due to perceived environmental risks. Nonetheless, as known in the art, it has been difficult to provide a laminating resin having reduced emissions in combination with suitable physical properties relating to, for example, strength, elongation, and toughness. Applicant has successfully addressed the above problems and provides a laminating resin composition which exhibits a desirable combination of physical properties along with low volatile emissions. A laminating resin composition possessing such characteristics is unexpected and is nowhere taught in the art.

With respect to the previously cited references, Kawabata proposes a gel coating resin allegedly having improved physical properties (see col. 1, lines 5-18). Kawabata teaches that the resin must contain certain levels of monomers in order to achieve the improved physical properties. Kawabata teaches that at least 15 parts of styrene monomer must be used in the

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resin. If this amount is not employed "desired curing properties will not be obtained" (col. 3, lines 62-63). Kawabata further teaches that the resin must contain at least 15 parts by weight of polyfunctional acrylate. If this amount is not employed, "resin compositions having high hardness will not be obtained." (col. 4, lines 20-22). Kawabata further discourages the use of vinyl esters in connection with resins intended to be used as laminating materials.

Smeal et al. is directed to laminating resins which use bisphenol-A dimethacrylate. Applicants do not employ such a bisphenol compound.

Lee has been cited as disclosing the recited vinyl ester resin. Kawabata, however, expressly states that vinyl ester resins should be avoided. Thus the combination of Kawabata with Lee as asserted in the related applications would be improper.

It is respectfully submitted that none of the previously cited references disclose or suggest the present invention, and such remarks should be considered doing examination of the present application.

Any questions that the Examiner may have regarding this correspondence can be directed to the undersigned who may be reached at (919) 854-1400.

Respectfully submitted,

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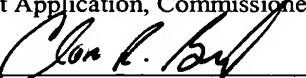
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